

CARANO, whose paper was noticed in the March number of this journal. From a number of careful measurements of trunks of different species the author concludes that there is no secondary growth in the stem of *Pandanus*, and that the dimensions of the stem are to be ascribed wholly to the primary growth in the vegetative cone.—M. A. CHRYSLER.

**Subsoil water and forests.**—PEARSON<sup>22</sup> has investigated the level of forest subsoil waters in India as compared with readings made in Russia and France. The conclusions are as follows: the levels within the forest are lower and steadier than those without, the effect of rain is felt later and lasts longer within than without, and the old woods lower the level more than young woods.—J. M. C.

**Mutation in *Nephrolepis*.**—Observations upon plants of *Nephrolepis Duffii* cultivated in a warm, moist atmosphere have brought GOEBEL<sup>23</sup> to the conclusion that this species is a mutation from *N. cordifolia*, the mutation here being a case of atavism. He believes that this and other cases of mutation in ferns may be due to adaption to environment.—CHARLES J. CHAMBERLAIN.

**Leguminosae of Porto Rico.**—Miss JANET PERKINS<sup>24</sup> has published an account of the Leguminosae of Porto Rico, 67 genera and 141 species being recognized. One genus (*Stahlia*) and eight species are peculiar to the island. The number of genera is rather remarkable, the largest being *Cassia* with 16 species. No new species are described.—J. M. C.

**Crossing of *Reana* and *Zea*.**—VILMORIN<sup>25</sup> has reported the crossing of a species of *Reana* (teosinte) with *Zea Mays*, the latter being the pollen parent. The phenomenon of xenia was strikingly developed, the characteristics of the two genera appearing in the ears.—J. M. C.

**Diseases of cereals.**—BUTLER<sup>26</sup> has described four diseases of grasses in India caused by *Sclerospora graminicola*, the hosts being *Pennisetum typhoideum*, *Andropogon Sorghum*, *Setaria italica*, and *Euchlaena luxurians*.—J. M. C.

<sup>22</sup> PEARSON, RALPH S., The level of subsoil waters with regard to forest. *Indian Forester* 33:57-69. 1907.

<sup>23</sup> GOEBEL, K., Morphologische und biologische Bemerkungen.—17. *Nephrolepis Duffii*. *Flora* 97:38-42. 1907.

<sup>24</sup> PERKINS, J., The Leguminosae of Porto Rico. *Contrib. U. S. Nat. Herb.* 10: 133-220. 1907.

<sup>25</sup> VILMORIN, PH., *Reana luxurians* × *Zea Mays*. *Bull. Soc. Bot. France* 54:39-42. pl. I. 1907.

<sup>26</sup> BUTLER, E. J., Some diseases of cereals caused by *Sclerospora graminicola*. *Mem. Dept. Agric. India Bot. Series* 21: pp. 24. pls 5. 1907.